

## BACKGROUND INFORMATION

### PROGRAM SUMMARY

The Texas LoanSTAR (Saving Taxes and Resources) Program finances energy-related cost-reduction retrofits for state, public school district (excluding charter schools), public college, public university, and tax-district supported nonprofit hospital facilities. Low interest rate loans are provided to assist those institutions in financing their energy-related cost-reduction efforts. The program's revolving loan mechanism allows Applicants to repay loans through the stream of energy cost savings realized from the projects.

### LOAN BACKGROUND

If awarded under the terms of this Notice of Loan Fund Availability and Request for Applications (NOLFA/RFA), projects financed by LoanSTAR must have a composite simple payback of ten (10) years or less for design-build and design-bid-build projects and a total project payback of ten (10) years or less for energy savings performance contracts. In addition, each ECRM and Utility Cost Reduction Measure (UCRM) must have a simple payback that does not exceed the estimated useful life (EUL) of the ECRM or UCRM. Applicants are encouraged to consider renewable energy technologies when evaluating ECRMs and UCRMs.

Utility dollar savings are the number one criterion for determination if the measure can be considered an eligible Energy Cost Reduction Measure (ECRM). ECRMs are not limited to those activities that save units of energy. An ECRM could conceivably call for actions which save no energy or consume additional BTUs, but save utility budget dollars. Examples of such ECRMs include demand reduction, increased power factor, load shifting, switching utility rate structures, and thermal storage projects.

Before entering into a LoanSTAR loan agreement, Applicants are required to submit an Energy Assessment Report (EAR) for Design-Bid-Build Projects and Design-Build Projects, or a Utility Assessment Report (UAR) for Energy Savings Performance Contracts, or a Systems Commissioning Report in the case where the commissioning meets LoanSTAR payback requirements. All LoanSTAR projects must be analyzed by a Professional Engineer licensed in the State of Texas. The Engineer is selected by the Applicant.

When an Engineer analyzes a project, he/she will submit the details of his/her analysis in the form of an EAR for Design-Bid-Build Projects and Design-Build Projects, or a UAR for Energy Savings Performance Contracts. The EAR is prepared in accordance with the LoanSTAR Technical Guidelines (<http://seco.cpa.state.tx.us/lsguidelines/>) prescribed format. The UAR is prepared in accordance with the SECO Performance Contracting Guidelines (<http://seco.cpa.state.tx.us/perf-contract/>) prescribed format. There is not a prescribed format for Systems Commissioning Reports.

Project descriptions and calculations contained within the EAR, the UAR, and the Systems Commissioning Reports must be reviewed and approved by SECO before project financing is authorized.

Project designs for Design-Bid-Build must be reviewed and approved by SECO before construction can commence. Design-Build project designs must be sufficiently complete to be reviewed and approved by SECO before construction can commence. Design-Bid-Build, Design-Build, and Energy Savings Performance Contracts are monitored during the construction phase and at project completion.

Post-retrofit energy savings should be monitored by the Applicant in Design-Bid-Build and Design-Build projects to ensure that energy cost savings are being realized. The level of monitoring may range from utility bill analysis to individual system or whole building metering, depending on the size and types of retrofits installed.

For Energy Savings Performance Contracts, a Measurement and Verification (M+V) plan must be developed and approved by SECO. Post construction measurement and verification costs must be included as part of the total project cost when calculating the payback.

Additional LoanSTAR funds can be borrowed for metering of large, complex retrofits in order to maximize the probability of achieving, or exceeding, calculated savings. However, the maximum allowable loan amount, including the cost of the metering, cannot be exceeded.

### **APPLICATION SUMMARY**

Applications must be submitted through the NOLFA/RFA process.

- The maximum loan amount shall not exceed \$7.5 million.
- The interest rate is set at 2.0%.
- The loan repayment term is equal to the Total Loan Payback for Design-Bid-Build and Design-Build projects and the Total Project Payback for Energy Savings Performance Contracts. The individual ECRM/UCRM must demonstrate a simple payback of less than the ECRM's/UCRM's estimated useful life.
- Project expenses will be reimbursed on a "cost reimbursement" basis.
- Borrower will be required to comply with federal Solid Waste Disposal Act, and, if applicable, National Environmental Policy Act, and National Historic Preservation Act.
- Applicants will ensure that the State Historical Preservation Office (SHPO) is consulted in any project award that may include a building or site of historical importance. In this regard, SHPO guidance will be solicited and followed to ensure that the historical significance of the building will be preserved. All requirements are set out in the sample contract.
- SECO will conduct periodic on-site monitoring visits on all building retrofit projects.
- All improvements financed through the LoanSTAR Revolving Loan Program shall meet minimum efficiency standards (as prescribed by applicable building energy codes). Examples of projects that are acceptable may include:
  - Building and mechanical system commissioning and optimization
  - Energy management systems and equipment control automation
  - High efficiency heating, ventilation and air conditioning systems, boilers, heat pumps and other heating and air conditioning projects
  - High efficiency lighting fixtures and lamps
  - Building Shell Improvements (insulation, adding reflective window film, radiant barriers, and cool roof.)
  - Load Management Projects
  - Energy Recovery Systems
  - Low flow plumbing fixtures, high efficiency pumps
  - Systems commissioning
  - Renewable energy efficiency projects are strongly encouraged wherever feasible, and may include installation of distributed technology such as rooftop solar water and space heating systems, geothermal heat pumps(only closed loop systems with no greater than 10 ton

capacity), or electric generation with photovoltaic or small wind and solar-thermal systems. If there are closed-loop geothermal heat pumps greater than 10 ton capacity involved, then Applicants will be responsible for further National Environmental Policy Act (NEPA) review by DOE in the event of an award. If renewable generation greater than 20 KW is involved, Applicants will be responsible for further NEPA review by DOE.

### **APPLICATION ELIGIBILITY REQUIREMENTS**

The Texas Comptroller of Public Accounts (CPA) and the State Energy Conservation Office (SECO) administer the LoanSTAR revolving loan program. Applicants must meet eligibility requirements before submitting a loan application.

As part of the application process, Applicants shall submit one of the following documents,

1. EAR for Design-Bid-Build and Design-Build projects,
2. UAR for Energy Savings Performance Contracts,
3. Commissioning Report for commissioning projects,
4. Preliminary Energy Assessment (PEA) for both Design-Bid-Build and Design-Build projects, Energy Savings Performance Contracts, and commissioning projects. The PEA must be completed by a Professional Engineer licensed in the State of Texas. PEAs must include ECRMs or UCRMs that will be completed to reduce utility (energy and water) costs. Project costs and simple paybacks must also be documented for each ECRM and UCRM in the PEA, **or**
5. Project Assessment Commitment (PAC) for Design-Bid-Build and Design-Build projects, for Energy Savings Performance Contracts, or for commissioning projects.

### **APPLICATION REVIEW PROCESS**

Prior to the Loan Application submittal, SECO will establish an Evaluation Committee for the full review and evaluation of eligible applications. The Evaluation Committee shall include employees of the Comptroller and may include other impartial individuals who are non-Comptroller employees.

A Loan Application, submitted through a NOLFA/RFA process, must be reviewed by the SECO legal counsel before a loan can be considered. SECO's legal counsel checks the applications for eligibility, for compliance with the terms of this NOLFA/RFA, and for thoroughness. The applications that meet minimum qualifications and meet eligibility requirements are then distributed to the members of the Evaluation Committee for their independent review and evaluation.

The Evaluation Committee will review and individually score each written application. The Evaluation Committee has the option of selecting the top scoring applications and may, but is not required to, call the top scoring Applicants to come to SECO offices in Austin, Texas for an interview. If interviews are requested, the Evaluation Committee may ask each Applicant a series of questions to clarify responses in their application. The Evaluation Committee can, in its sole discretion, proceed directly to Applicant scoring and selection without the necessity of any oral interviews.

## **SUCCESSFUL APPLICANTS**

Successful Applicant(s) will be notified upon their selection.

### **If Applicant Submitted an EAR, UAR, or Commissioning Report**

The submitted EAR, UAR, or Commissioning Report will be reviewed by the SECO technical staff or its contractor. The technical staff may request the Professional Engineer to provide additional information or calculations.

SECO shall negotiate a Loan Agreement with the apparent Successful Applicants after the EAR, UAR, or Commissioning Report has been reviewed and approved. The reports must be deemed to comply with LoanSTAR Technical Guidelines for EARs and SECO Performance Contracting Guidelines for UARs in order to move forward with the preparation of a Loan Agreement.

The Loan Agreement is a document that authorizes the institution to proceed with the design of their projects and includes guaranteed funding for the ECRMs stated in the approved EAR, UAR or Commissioning Report. If a Loan Agreement cannot be successfully negotiated within a reasonable period of time, negotiations will be terminated, and negotiations with the next highest ranking Applicant may commence. The process may continue until one or more Loan Agreements are signed or the loan offer is withdrawn. SECO may at any time, upon failure of negotiations, choose to reissue or withdraw the loan offer rather than continue with negotiations. If SECO decides, in its sole discretion, to award more than one loan, SECO may proceed with negotiations in the above-described manner with more than one Applicant simultaneously.

### **If Applicant Submitted a Project Assessment Commitment (PAC) or Preliminary Energy Assessment (PEA)**

Those applicants will receive a Memorandum of Understanding (MOU) from SECO. The sole purpose of the MOU is to reserve LoanSTAR funds for the successful Applicant during the period the EAR, UAR, or Commissioning Report is being prepared. This document should not be construed as a loan agreement and does not authorize the expenditure of funds for LoanSTAR projects. LoanSTAR project expenditures cannot be incurred before the effective date cited in a fully executed loan agreement unless those expenditures are approved in the LoanSTAR Technical Guidelines. Commitment of funding to applicants will take place upon execution of the MOU. Those applicants must then submit an EAR, UAR, or Commissioning Report by the date identified in the MOU.

A Professional Engineer, licensed in the State of Texas, shall prepare the EAR, UAR or Commissioning Report. The EAR shall be prepared in accordance with the guidelines and formats provided in the Texas LoanSTAR Program Guidebook: Guidelines, Formats, Program Requirements and Documents. The UAR shall be prepared in accordance with the SECO Performance Contracting Guidelines. The Successful Applicant's CFO will also certify that three (3) original bound copies and one (1) electronic copy of the completed reports will be delivered to SECO for review within the required submittal date.

The submitted EAR, UAR, or Commissioning Report will then be reviewed by the SECO technical staff or its contractor. The technical staff may request the Professional Engineer to provide additional information or calculations. If the report is not submitted within the Application time constraints, SECO may, in its sole discretion, choose to withdraw the loan offer.

## **DESIGN-BID-BUILD AND DESIGN-BUILD REVIEW PROCESS**

After a Loan Agreement has been executed, the Applicant can begin the process of designing and implementing the projects identified in the report.

A Design-Bid-Build process includes two milestones.

1. Selecting a design Engineer. The Engineer selected to design the projects can be the Engineer who prepared the Energy Assessment Report; however, the Applicant must follow competitive procedures, based upon qualifications, to select the Engineer.
2. Preparing the design documents. The Applicant must submit Design Development Reports and Detailed Design Reports (Volume I, Appendix L of the LoanSTAR Technical Guidelines) to SECO for technical review and approval. The SECO Technical Review will ensure that the design specifications match the projects identified in the report.
  - i. Design Development Report (50%) – This design review report will be completed when the design process is approximately 50% complete and will verify that the design is proceeding in a direction which conforms with the approved EAR.
  - ii. Detailed Design Review Report (100%) – This design review report will verify that the completed design conforms to the intent of the approved energy assessment. In addition, the reviewer will evaluate the proposed schedule and estimated project construction budget provided by the design engineer.

The Applicant agrees that bidding and construction activities will not begin until after Applicant received SECO approval that the submitted designs conform to LoanSTAR Technical Guidelines. Applicants agree to competitively select contractors or bidders as required by state law.

A Design-Build process also includes two milestones.

3. Selecting a design Engineer. The Engineer selected to design the projects can be the Engineer who prepared the Energy Assessment Report; however, the Applicant must follow competitive procedures, based upon qualifications, to select the Engineer.
4. Preparing the design documents. The Applicant must submit Design Development Reports and Detailed Design Reports (Volume I, Appendix L of the LoanSTAR Technical Guidelines) to SECO for technical review and approval. The SECO Technical Review will ensure that the design specifications match the projects identified in the report.
  - i. Design Development Report (50%) – This design review report will be completed when the design process is approximately 50% complete and will verify that the design is proceeding in a direction which conforms with the approved EAR.
  - ii. Detailed Design Review Report – This design review report will verify that the design is sufficiently complete to determine that the project conforms to the intent of the approved energy assessment. In addition, the reviewer will evaluate the proposed schedule and estimated project construction budget provided by the design engineer. Any subsequent design elements completed after this review shall be forwarded to SECO to ensure the additional design elements meet the LoanSTAR Technical Guideline requirements.

The Applicant agrees that bidding and construction activities will not begin until after Applicant received SECO approval that the submitted designs conform to LoanSTAR Technical Guidelines. Applicants agree to competitively select contractors or bidders as required by state law.

## **ENERGY SAVINGS PERFORMANCE CONTRACT DESIGN REVIEW PROCESS**

There is no design review process for Energy Savings Performance Contracts unless a system commissioning is a component of that program.

## **SYSTEMS COMMISSIONING REVIEW PROCESS**

Systems commissioning may be part of a Design-Bid-Build project, a Design-Build project, an Energy Savings Performance Contracting project or it may be a stand-alone activity. To be considered as an ECRM/UCRM or a stand-alone activity, the Systems Commissioning Report must be reviewed and approved by SECO prior to loan execution.

Commissioning activities typically include surveying, interviewing, baseline measurements and analyses, definition of problems, definition of solutions, implementation of solutions, balancing, and verification measurements. Some of these steps may be repeated as necessary to optimize systems operations. In some cases system considerations extend beyond just the equipment installed under the LoanSTAR ECRMs. This is to insure that total building system effects are comprehended and optimized. Since both heating and cooling systems are usually involved in this process, optimization activities may extend over a six-month period or longer. Documentation of findings and corrections, along with recommended operating procedures should be provided by the commissioning organization.

## **CONSTRUCTION MONITORING PROCESS**

Applicant shall prepare and submit a Monthly Progress Report via the internet on or by the 10th day of each month. Reporting shall be in a format prescribed by SECO.

Applicant agrees to notify SECO when the project reaches 50% completion. SECO will then perform a construction monitoring visit to ensure the project complies with the LoanSTAR Technical Guidelines or SECO Performance Contracting Guidelines. After the construction monitoring visit, SECO will provide the Applicant with a copy of the On-Site Construction Monitoring Report. This report will provide a general overview of construction site activities and will address issues of budget, schedule, and conformance of the work with the design documents and will make recommendations concerning any necessary changes in scope or budget.

Applicant agrees to notify SECO when the project reaches 100% completion. SECO will then perform a construction monitoring visit to ensure the completed project complies with the LoanSTAR Technical Guidelines or SECO Performance Contracting Guidelines. After the construction monitoring visit, SECO will provide the Applicant with a copy of the Final Monitoring Report. This report will be similar to the On-Site Construction Monitoring Report. In addition, it will focus on compliance by the construction contractor with the “close-out” documentation requirements outlined in the bid documents. The report will verify that guarantees, warranties, releases, O&M manuals, training sessions required, etc. have been provided by the contractor.

Applicant shall then certify with a written letter that materials and equipment to be replaced have been properly disposed. These materials would include, but not be limited to, light bulbs, ballasts, switches, controls, HVAC equipment, refrigerants, pumps, fans, blowers, piping, valves, conduit, wiring, and boilers. Certification shall include proper disposal of hazardous materials. All waste disposals must be conducted in compliance with local, State of Texas, and federal rules and regulations.

Upon completion of the project and acceptance by SECO, the Applicant will submit a Final Completion Report to SECO (LoanSTAR Technical Guidelines) and a final voucher request.

**LOAN REPAYMENT PROCESS**

After submittal of the Final Completion Report to SECO and the final voucher request, Applicant will request a Loan Repayment Schedule from SECO.

The Loan Repayment Schedule will contain the outstanding loan balance, the term of the loan, and the schedule of quarterly payments to SECO.

The outstanding loan balance consists of the borrowed dollars plus the interest accrued on the borrowed dollars. Interest begins accruing on the borrowed dollars when the applicant receives that money. The interest continues to accrue until the date of the first scheduled loan repayment.

The loan repayment term is equal to the Total Loan Payback for Design-Bid-Build and Design-Build projects and the Total Project Payback for Energy Savings Performance Contracts.

The schedule of quarterly payments will contain equal payments. The payments will be due at the end of each fiscal quarter, using the State's fiscal calendar. The payments do not vary according to the actual energy savings. Payments are due regardless of whether the Applicant has achieved that level of energy savings.

SECO forwards the Loan Repayment Schedule to the Applicant based on the incurred loan amount. Loan repayments will begin within sixty days of project completion. Payments are due quarterly.

**APPLICATION SCHEDULE OF EVENTS**

<b>Description</b>	<b>Date</b>
<b>Issuance of Request for Application</b>	October 25, 2013, after 10 a.m. CST
<b>Submission of Questions</b>	November 18, 2013, 2 p.m. CST
<b>Official Response to Questions Posted</b>	November 22, 2013, or as soon thereafter as practical
<b>Application Deadline</b>	December 13, 2013, 2 p.m. CST
<b>Grant Award</b>	As soon thereafter as practical